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# WASHINGTON MONUMENT



## PERMANENT SECURITY IMPROVEMENTS ENVIRONMENTAL ASSESSMENT



*Responsible Agency:*

**National Park Service**

*Cooperating Agency:*

**National Capital Planning Commission**

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APRIL 2002

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### **Abstract**

The National Park Service has prepared an Environmental Assessment (EA) to address the proposed permanent security improvements for the Washington Monument and its Grounds. This EA addresses the impacts associated with the implementation of two build alternatives, together with a No Action Alternative. Mitigation measures are also provided for each of the alternatives. The information contained in this EA is required to fulfill National Environmental Policy Act and National Historic Preservation Act requirements for the proposed action.

### **Direct Comments on the EA by fax or email to:**

Arnold Goldstein, Superintendent  
National Capital Parks – Central  
National Park Service – National Capital Region  
Fax: (202) 426-1835  
Email: [NACC\\_Superintendent@nps.gov](mailto:NACC_Superintendent@nps.gov)

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## **EXECUTIVE SUMMARY**

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## EXECUTIVE SUMMARY

The National Park Service (NPS) proposes permanent improvements to the current temporary security systems at the Washington Monument and its Grounds and related revisions to the 1993 Development Concept Plan. These improvements would include the construction of a permanent visitor access/screening facility to replace the interim facility located adjacent to the Monument, and the installation of a permanent vehicle barrier system to replace the temporary concrete jersey barrier system. The program also includes general improvements to the Monument Grounds. These proposed improvements are the subject of this Environmental Assessment (EA).

The NPS has prepared this EA in compliance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA, the National Historic Preservation Act (NHPA), and the NPS Director's Order-12 (DO-12). This EA was prepared in cooperation with the National Capital Planning Commission (NCPC). This EA seeks to determine the potential impacts and recommended mitigation measures related to the proposed action, as well as a No Action Alternative. The EA addresses short-term construction-related impacts and long-term operational effects, as well as the cumulative impacts that would result from this and other projects within the study area.

### Purpose and Need

The purpose of the EA is to help NPS decision-makers meet the objectives for the design and construction of a new permanent screening facility and vehicle barrier system. The objectives include improvement of security, improvement of visitor flow, provision of outdoor recreation opportunities, preservation of cultural landscape quality, improvement of accessibility, and preservation of the Monument structure and the Monument Lodge.

The existing concrete jersey barriers and the interim visitor security facility obstruct important vistas to and from the Monument and Grounds, intrude on the setting of this important national icon, and disrupt pedestrian circulation patterns. In addition, the current system requires heavy personnel staffing by the U.S. Park Police.

The pathways and facilities on the Monument Grounds also require updating. Walks and paths to the base of the Monument need to be made more accessible for persons with physical disabilities. Concession facilities on the site are inappropriately situated, and restroom facilities are inadequate. In addition, conditions currently do not allow the provision of educational and interpretive programs and visitor services to meet NPS standards. Finally, while waiting to obtain tickets or to ascend the Monument, visitors to the Monument are completely exposed to the weather.

### Background

The Washington Monument, as the nation's foremost memorial to George Washington, is one of the most recognizable structures in the world. The Washington Monument Grounds have served and continue to serve as a vital public space in the Nation's Capital for celebrations, demonstrations, and recreation.

L'Enfant's Plan of Washington, DC, defined the physical and symbolic character of the Nation's Capital through its arrangement of buildings, structures, and views. The Senate Park Commission of 1901, known as the McMillan Commission, reconciled the Washington Monument with the L'Enfant plan geometry and its original siting for the Monument, as well as reserved the Monument Grounds for public enjoyment. Various iterations of design concepts for the Washington Monument and Grounds over the last 30 years have maintained the spirit of the L'Enfant Plan by maintaining the primary structures and monuments "as dominant elements in the landscape" and fitting the plans to the site's topography.

### Alternatives Under Consideration

This EA addresses the environmental consequences of two build alternatives, as well as the impacts associated with maintaining the status quo, as follows: Alternative A (Below-Grade Alternative); Alternative B (Above-Grade Alternative); and Alternative C (No Action Alternative). The two build alternatives are intended to fulfill the security goals and objectives

for the Monument through the three types of physical improvements: (1) visitor screening facility, (2) vehicle barrier system, and (3) Grounds improvements.

**Alternative A** (Below-Grade Alternative) includes an underground screening facility and passageway to the Monument and a landscape vehicle barrier system of walled terraces and pathways. The existing above-ground visitor queuing area in the Monument plaza, the existing above-ground visitor screening facility located on the plaza immediately adjacent to the eastern side of the Monument, and the existing ticket distribution kiosk on the west side of 15<sup>th</sup> Street at Madison Drive would be removed. The Monument Lodge would be rehabilitated as the portal to a new underground visitor screening facility that would include a ticketing/lobby area, a security queuing and screening area, an educational and interpretive area, and other visitor services. An underground passageway would gently slope upward (less than 5 percent grade) to the Monument, connecting to the Monument's elevator core, which would be lowered one floor. A skylight would be installed to allow light into the screening facility and preserve the visual connection to the Monument. Under Alternative A, a graded system of walled terraces 24 to 30 inches high around the Monument would provide a barrier system for stopping moving vehicles. This system would replace the concrete jersey vehicle barriers. A berm, set back approximately 50 feet from the wall west of the Monument, would be used to screen the wall from the west. The existing grade at the Monument's grassy mound would be regraded to achieve a more uniform topography. Alternative A also includes improvements to the Washington Monument Grounds to include replacement of concrete at the plaza with high-quality pavers and benches. The walkways would be reconfigured for easier pedestrian flow and would be more accessible for persons with physical disabilities. The parking lot at 16<sup>th</sup> Street would be removed, which would allow the German-American Friendship Garden to be completed. The landscape would be augmented with new trees along the primary streets and other locations on the Grounds.

**Alternative B** (Above-Grade Alternative) includes a visitor screening facility located above-ground near the Sylvan Theater, away from the primary views and vistas. This new facility would replace the existing above-ground visitor queuing area around the perimeter of the Monument plaza, the existing visitor screening facility located in a temporary building on the plaza immediately adjacent to the eastern side of the Monument, and the existing ticket

distribution kiosk on the west side of 15<sup>th</sup> Street at Madison Drive. The new screening facility would consist of two buildings clustered in a less visible and less used part of the Grounds. The buildings would include ticketing and security procedures, an educational and interpretative display, and other visitor services. After visitors are screened, law enforcement personnel would escort the visitor groups in an above-ground, double-fenced security pathway to a double-locked door to be installed at the entrance to the Monument. Under Alternative B, security bollards would be placed at the 1.25-mile perimeter of the Monument Grounds to provide a barrier system that would stop moving vehicles, replacing the existing jersey barriers. Alternative B would also include restoration of the Monument Lodge and improvements to the Washington Monument Grounds. The asphalt paving at the plaza would be replaced with grass and a low granite wall. The parking lot at 16<sup>th</sup> Street would be removed, which would allow the German-American Friendship Garden to be completed.

**Alternative C** (No Action Alternative) would retain the existing structures and elements of the Washington Monument Grounds in their existing use and condition. There would be no new development or reconfiguration of facilities. Specifically, the No Action Alternative does not involve a return to a previous condition, but involves the continued use of existing temporary measures for Monument security, visitor screening and access, and vehicle barriers. The existing security system, which consist of NPS and U.S. Park Police personnel identifying, grouping, and isolating ticketed tour members in the plaza around the Monument, would continue under the No Action Alternative. At designated times, groups undergo screening in the interim structure located adjacent to the base of the Monument. The existing temporary concrete jersey barrier system would remain and be visible on the Monument Grounds and from West Potomac Park, the Ellipse, and the National Mall. Therefore, implementation of the No Action Alternative would necessitate further efforts to find a suitable replacement for the concrete jersey barriers. Under the No Action Alternative, paths on the Monument Grounds would remain unimproved in their current locations. The parking lot on the northern portion of the Grounds at 16<sup>th</sup> Street would remain and the German –American Friendship Garden would not be completed.

### Environmental Consequences

Following a thorough review of potential resource disciplines, a few topics were identified for a more comprehensive analysis: Geophysical Resources (subsidence concerns); Visual/Scenic Resources (aesthetic concerns); and Visitor Experience (resource integrity concerns). Additional topics selected for analysis based on the potential for impacts include Water Resources, Vegetation, Air Quality, Noise, Historic Resources, Land Use Recreation, Infrastructure, and Transportation. For these resources, the following summary table of project impacts is provided for the three alternatives.

RESOURCE	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C
<b>NATURAL RESOURCES</b>  <b>Geophysical Resources</b> Topography Soils Geology Groundwater	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Minor cut and fill on the Monument mound for terraced walls and a more uniform character.</li> <li>Minor soil disturbance from cut and fill.</li> <li>Negligible change in bearing force of the Monument on the underlying clay layer.</li> <li>No impacts related to groundwater.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Negligible topography impacts.</li> <li>Negligible change in bearing force of the Monument on the underlying clay layer.</li> <li>No impacts related to groundwater.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No geophysical impacts.</li> </ul>
<b>Water Resources</b> Surface Water Wetlands Floodplains	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No increase in impervious surface</li> <li>No disturbance of wetlands.</li> <li>No impact on floodplains.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No increase in impervious surface.</li> <li>No disturbance of wetlands.</li> <li>No impact on floodplains.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No water resource impacts.</li> </ul>
<b>Vegetation</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Minor disturbance of grasslands (sod).</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Moderate disturbance of grasslands (sod) and major impact on trees in southeast corner and roots of perimeter trees.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No vegetation impacts.</li> </ul>
<b>Wildlife and Aquatic Life</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impact on species.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impact on species.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts.</li> </ul>



RESOURCE	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C
<b>Hazardous Materials</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"><li>• Remediation to improve minor soil contamination.</li><li>• Modification of existing building materials that may be hazardous.</li></ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"><li>• Remediation to improve minor soil contamination.</li><li>• Modification of existing building materials that may be hazardous.</li></ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"><li>• Soil testing results indicate minor soil contamination.</li><li>• No hazardous building materials impacts.</li></ul>
<b>Air Quality</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"><li>• No increase in visitor traffic; therefore, no increase in visitor traffic emissions.</li></ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"><li>• No increase in visitor traffic; therefore, no increase in visitor traffic emissions.</li></ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"><li>• No impacts.</li></ul>
<b>Noise</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"><li>• No increase in visitor traffic; therefore, no increase in visitor traffic noise.</li></ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"><li>• No increase in visitor traffic; therefore, no increase in visitor traffic noise.</li></ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"><li>• No impacts.</li></ul>

RESOURCE	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C
<b>CULTURAL RESOURCES</b> Archaeological Res.	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts to archaeological sites.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts to archaeological sites.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts.</li> </ul>
<b>Historic Resources</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Positive historical impact of preserving the structural integrity of the Monument, replacing plaza asphalt with more appropriate materials, removal of unsympathetic external additions to Monument Lodge, removal of jersey barriers and temporary screening facility.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Positive historical impact of preserving the structural integrity of the Monument, replacing plaza asphalt with grass, removal of unsympathetic external additions to Monument Lodge, removal of jersey barriers and temporary screening facility.</li> <li>New structures at Sylvan Theatre and perimeter bollards would require sympathetic design.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Jersey barriers, interim screening facility, and unsympathetic additions would continue to adversely impact historic character and context.</li> </ul>
<b>Cultural and Ethnographic Resources</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Underground facilities would preserve cultural landscape.</li> <li>Seating on terraced retaining walls would enhance cultural events.</li> <li>Removal of parking lot would allow Friendship Garden to be completed.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>New facilities at Sylvan Theater with double-fenced security pathway would result in major negative impacts on the cultural landscape.</li> <li>Removal of parking lot would allow Friendship Garden to be completed.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Jersey barriers and interim screening facility would continue to limit cultural activities.</li> </ul>
<b>Visual Resources</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Positive impact of visitor queuing out of sight.</li> <li>Walled terraces would have minor visual impact.</li> <li>Removal of jersey barriers, temporary screening facility, parking lot, and plaza asphalt would have additional positive visual impact.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Security pathway and perimeter bollards would produce major negative visual impacts.</li> <li>Removal of jersey barriers, temporary screening facility, parking lot and plaza asphalt would somewhat reduce the negative visual impact.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Jersey barriers and interim screening facility would continue to obstruct views to and from the Monument and visually impact the aesthetic quality and integrity of the Monument and Grounds.</li> </ul>

RESOURCE	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C
<b>VISITOR USE AND EXPERIENCE</b> <b>Visitation Patterns</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No increase to capacity of Monument elevator; therefore, no increase in visitation capacity.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No increase to capacity of Monument elevator; therefore, no increase in visitation capacity.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts to visitation patterns.</li> </ul>
<b>Visitor Experience</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Change in ticketing and access procedure would provide shelter and educational/interpretive exhibits.</li> <li>Underground approach would still allow above-ground experience before and/or after internal Monument tour.</li> <li>Visitor access would be improved due to more accessible pathways.</li> <li>Fewer Park Police vehicles would be parked on the Grounds.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Change in ticketing and access procedures would provide some shelter and educational/interpretive exhibits, but new location away from pedestrian access would not be easily identified.</li> <li>Double-fenced above ground approach would detract from experience and would prohibit circumnavigation of the Monument at the plaza.</li> <li>Fewer Park Police vehicles would be parked on the Grounds.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Visitor information limited to discussions with Park Rangers.</li> <li>Pathways not easily accessible.</li> <li>Jersey barriers and interim screening facility detract from experience.</li> </ul>
<b>Resource Interpretation</b>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Improved educational and interpretative exhibits would be provided in sheltered waiting areas.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Improved educational and interpretative exhibits would be provided in sheltered waiting areas.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Lack of time and physical space for educational and interpretive programs would continue.</li> </ul>

RESOURCE	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C
<b>SOCIOECONOMIC ENVIRONMENT</b> Land Use	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Removal of jersey barriers and parking lot would improve general land use.</li> <li>Consistent with National Capital Comprehensive Plan.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Removal of jersey barriers and parking lot and introduction of double-fenced security pathway would not improve general land use.</li> <li>Somewhat consistent with National Capital Comprehensive Plan.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts.</li> </ul>
Recreation	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Minor impacts to casual recreation within area of Monument terraces.</li> <li>Improved accessibility would enhance recreation opportunities for persons with disabilities.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Perimeter bollards would have a negative impact on staging for recreation, special events, First Amendment activities and festivals.</li> <li>Secured access pathway would impede activities in southeastern area and would disrupt pedestrian /jogger circulation</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts.</li> </ul>
Socioeconomic Resources	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts.</li> </ul>
Infrastructure	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Minor increase in use of electricity, water, and sewer for new facilities.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Minor increase in use of electricity, water, and sewer for new facilities.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No impacts.</li> </ul>
Transportation	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Improved pedestrian access with realigned and more accessible walkways.</li> <li>Minor loss of 108 parking spaces.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>Double-fenced security pathway would have a major impact on pedestrian circulation.</li> <li>Minor loss of 108 parking spaces.</li> </ul>	<b>IMPACTS:</b> <ul style="list-style-type: none"> <li>No improvement to the accessibility of walkways.</li> <li>Jersey barriers would continue to disrupt pedestrian access.</li> </ul>

### Summary of Cumulative Impacts

Cumulative impacts are defined as the collective effects of the proposed security improvements at the Washington Monument Grounds and the ongoing and proposed projects in the vicinity of the Grounds. Upon assessment of the potential cumulative effects associated with the development of Alternative A or Alternative B at the Monument Grounds, it was determined that resources of primary concern in this analysis included geophysical resources, visual resources, and visitor experience.

The impacts on topography and soils that can be attributed to either Alternative A or Alternative B would not be amplified by other projects in the vicinity of the Grounds. The geology of the Monument Grounds would not be affected by development under Alternative A or B. Several ongoing and proposed projects have been identified in the vicinity of the Washington Monument Grounds that could potentially involve temporary dewatering; however, the security improvements at the Grounds under Alternative A or B would not require dewatering and would not contribute to cumulative effects on groundwater. Overall, there would not be cumulative impacts on geophysical resources.

The proposed improvements to the visual environment of the Monument Grounds under Alternative A would include the replacement of the temporary security measures on the Grounds with attractive landscape treatments and terraces, removal of the 16<sup>th</sup> Street parking lot, removal of the unsympathetic addition to the Monument Lodge, and the completion of the German-American Friendship Garden. These changes would contribute positively to other improvements in the landscape around the Grounds resulting in a positive cumulative impact to visual resources.

Development of Alternative B would have adverse visual impacts due to proposed features such as the perimeter bollards and the double-fenced security pathway. These adverse impacts would be somewhat reduced by the removal of the temporary security measures from the Grounds, and the removal of the 16<sup>th</sup> Street parking lot on the Grounds. Therefore, Alternative B would have

a negative visual impact on the Monument and Grounds, and a minor cumulative effect on visual resources in the vicinity of the Monument Grounds.

With the development of either Alternative A or Alternative B, existing tours and interpretive opportunities would continue to be available at museums, memorials, and other NPS sites in the vicinity of the Washington Monument. These opportunities would continue to enhance the experience of visitors to Washington DC by providing information on the historic city and the nation's most important commemorative resources. Under Alternative A, the proposed underground screening facility and landscape security improvements would also enhance the visitor experience. Potential adverse impacts for some visitors from accessing the Monument through an underground facility would be mitigated by the added benefits of new facilities, protection from the elements, added interpretive functions, and improved visual experience. Additionally, visitors would continue to have access to the entire base of the Monument via accessible walkways. Alternative A would therefore contribute to positive cumulative impacts to the visitor experience in Washington, DC.

The development of Alternative B would have a negative impact on the visitor experience at the Grounds. The relocation of ticketing, security screening, and tour queuing to new facilities at the Sylvan Theatre would provide some protection from the elements but would alter the visitor experience and conflict with other activities at the Theatre. Additionally, visitors would continue to have access to base of the Monument via accessible walkways. However, the approach to the Monument would not be protected from the elements, and the proposed double-fenced pathway would obstruct access across the southeastern portion of the Grounds, precluding circumnavigation of the Monument. Therefore, Alternative B would have a negative impact on the experience of the Monument visitors, but a negligible cumulative effect on the experience of visitors to Washington, DC.

Development of Alternative A or Alternative B would have effects that would not contribute to cumulative impacts on water resources, vegetation, hazardous materials, air quality, noise, historic resources, cultural landscapes, land use, recreation, infrastructure, and transportation of the Monumental Core.

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